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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,032	03/31/2004	Jeffrey C. Clift	7162-0120	6267

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EXAMINER	
LAU, HOI CHING	

ART UNIT	PAPER NUMBER
2636	

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/814,032	CLIFT ET AL.	
	Examiner	Art Unit	
	Hoi C. Lau	2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 3-15 have been considered but are moot in view of the new ground(s) of rejection. Following is applicant's arguments:

a. Lea does not teach that the determining, comparing, and transmitting step all occur at each individual tracking station.

b. Applicant's invention advantageously reduces the network bandwidth.

c. Both Lea and Larson fails to teach selectively communicating a unique identifier to at least a second tracking station based on a predicted transit scenario of the entity to further reduce the level of network bandwidth.

d. Larson makes no mention that its network operates as a wireless ad hoc network.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lea et al. (U.S. 2004/0169589) in view of Larson et al. (U.S. 2005/0087596).

Regarding **Claim 1**, Lea's system comprises:

operating a plurality of tracking station in wireless ad-hoc network (page 3, paragraph 63, 65 and 66);

assigning to the entity at a first of the plurality of tracking stations a unique identifier (page 3, paragraph 66 and page 4, paragraph 82);

wirelessly transmitting the unique identifier from the entity to a least a second of the plurality of tracking stations (Figure 20 and 20a, page 1, paragraph 9 and page 3, paragraphs 61 and 66);

dynamically varying the number of the tracking stations on an ad-hoc basis responsive to variations in a tracking environment (page 6, paragraphs 121 and 140).

Further, it teaches the step of evaluating the strength of the transponder signal received by the more or more transceiver device which refers as a tracking station in order to determine location of the transponder carried by individual and analyzing the paths of travel of each individual over time from the location data retrieved and making physical adjustments to the defined space to reduce delays (page 1, paragraph 18 and page 2, paragraph 39 and 43 and page 2, paragraph 73).

It would have been obvious to one of ordinary skill in the art the path analysis technique of Lea is based on the predicated transit scenario of the entity wherein the remote master (tacking station transceiver) is transmitting data through LAN switches/Hub to each other which meets the limitation in argument (c).

Furthermore, it teaches determining the presence of the entity with a predetermined area at a first of the plurality of tacking stations responsive to detection of the unique identifier (page

1, paragraph 8 – 17) and comparing the unique identifier that has been detected with a database of unique identifiers through the application and database servers which in communication with ETC and Remote Master (tracking transceiver).

It fails to show the step of data comparison at the tracking station which determining and transmitting operation occurs.

Larson central processing unit serves to compare relevant personnel data (RFID) and biometric data stored in its database with that of the entity and they entity's RFID security tag for identity verification which able to determining the location of entity within a various portion of area and transmitting relevant data to other tracking station (figure 4-5 and paragraphs 21, 36, 67, 69 and 75).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to combine wireless ad hoc tracking function and data transmission of Lea with the teaching of tracking station distribution within a physical location includes determining, comparing and transmitting function of Larson because it would reduce the total amount of network bandwidth usage for data transmission.

However, it would have been obvious to one of ordinary skill in the art to understand the trade-off between a single facility includes all operation function with higher maintenance cost and smaller detection area vice versa a separation detection system which require a higher bandwidth but lower replacement cost and larger cover-zone. These are all engineering factor need to be considered based on the specific function and purpose of system. If the facility able to prove a huge amount bandwidth usage and maintenance, then the limitation of bandwidth will no longer be a major factor for system design.

As to **Claim 3**, it teaches storing the unique identifier on memory attached to the entity (page 4, paragraph 84). It is inherent that memory is a data-store.

As to **Claim 4**, Lea's system meets all the limitation of claims except it fails to show storing the unique identifier on a radio frequency identification tag.

However, Lea's system teaches the transponders have a unique ID or identification (page 4, paragraphs 82-83).

Larson's system teaches storing the unique identifier on a radio frequency identification tag (page 6, paragraph 60).

It would have been obvious to one of ordinary skill in the art at the time to implement Larson's RFID into Lea's system because Bluetooth transponder is a well-known subset of RFID tags which critics regard the technologies as essentially the same.

As to **Claim 5**, Lea's system suggests interface to a Biometric system to verify person and pass match for added security. For additional security, unique biological identifiers may be interfaced to the system (page 8, paragraph 185).

It fails to clearly state the step of assigning a unique identifier comprises performing a biometric scan of the entity.

Larson's system teaches this feature (page 3, paragraphs 31 and 36).

It would have been obvious to one of ordinary skill in the art at the time to implement Larson's biometric scan into Lea's system because it would provide an additional layer of security.

As to **Claim 6**, Larson's system teaches the biometric scan comprises at least one process selected from the group consisting of a facial scan, an iris scan, a fingerprinting, and obtaining a palm print (page 3, paragraphs 31 and 36).

As to **Claim 7**, Lea's system teaches wirelessly transmitting the unique identifier to a library "middleware" layer which handles all traffic to and from the tracking station/unique identification and the application and application database where the "middleware" layer performs the same function as a logging station (page 7, paragraphs 163-167).

As to **Claim 8**, Lea's system teaches propagating from the logging station to at least one of the plurality of tracking stations data that is relevant to the at least one of the plurality of tracking stations (page 3, paragraphs 26-27).

As to **Claim 9**, the combination meets all the limitation of claims except it fails to show the data is propagated during a system boot of the at least one of the plurality of tracking stations. However, Larson's system shows periodically synchronize the system with current information (page 4, paragraph 41 and page 5, paragraphs 50 and 53, and page 8, paragraph 76).

It would have been obvious to one of ordinary skill in the art at the time the periodic update throughout the system inherent the initial propagation includes system boot.

3. **Claims 10-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson et al. (U.S. 2005/0087596) in view of Lea et al. (U.S. 2004/0169589).

Regarding **Claim 10**, Larson's system teaches at least two tracking stations, each of the tracking stations comprise:

a processor (page 3, paragraph 34 and page 8, paragraph 75);

a wireless network adapter capable of operating in a wireless network (page 3, paragraph 36 and page 8, paragraph 75);

a radio frequency identification scanning device (page 8, paragraph 75) couple to the processor and responsive to a RFID tag for determining the presence of RFID tag within a predetermine area (paragraphs 21, 36, 67, 69 and 75).

Further, it teaches a data-store (108) containing a database of unique identifier information (figure 5 and paragraphs 26, 28, 31, 34 and 69).

It fails to show the method of wirelessly ad hoc network system to transmit the unique identifier to at least a second tracking station in order to determines a predicted transit scenario for an entity.

However, it mentions the reading devices and cards may also configure for longer-range communication to allow dynamic tracking of movement (paragraph 21), which is suitable to configure into an ad hoc network.

Lea teaches the technology of wirelessly ad hoc network system to transmit the unique identifier to at least a second tracking station in order to determines a predicted transit scenario for an entity and it would have been obvious to one of ordinary skill in the art to combine Larson's tracking system with the teaching of ad hoc network communication of Lea.

See claim 1 for rejection.

The combination fails to specific mention the processor compares the data and determines a predicted transit scenario.

It would have been obvious to one of ordinary skill in the art all determining, comparing and transmitting function require a processor or a least link to the processor in order to operate

since both tracking system is a computerize system (Larson figure 4-5 and Lea figure 22). Furthermore, the distribution of processor throughout the various portion of location along with the tracking unit verse a locally central processor response the main operation such as data comparison which communicate with other location through network would consider as a engineering design choice to compensate the trade-off factor for implementation of memory and bandwidth usage.

As to **Claim 11**, Larson's system teaches the processor, the wireless network adapter and the radio frequency identification scanning device are incorporated into a single unit (page 3, paragraphs 34-36 and page 8, paragraph 75).

As to **Claim 12**, Larson's system teaches each of the tracking stations comprises a biometric scanning device capable of uniquely identifying a person (page 3, paragraphs 34-36 and page 8, paragraph 75).

As to **Claim 13**, Larson's system teaches the processor, the wireless network adapter, and the radio frequency identification scanning device and the biometric scanning device are incorporated into a single unit (page 3, paragraphs 34-36 and page 8, paragraph 75).

As to **Claim 14**, Larson's system teaches the processor and wireless network adapter are components of a personal computer (page 3, paragraphs 34-36).

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Larson et al. (U.S. 2005/0087596) in view of Lea et al. (U.S. 2004/0169589), in further view of Huomo (U.S. 2004/0263319).

As to **Claim 15**, the combination meets all the limitation of claims except it fails to show the processor and wireless network adapter are components of a laptop computer. However, Larson's system shows the practice of Personal Digital Assistant (PDA) instead of laptop computer (page 7, paragraph 67).

Huomo's system shows the mobile tracking system may be any type of mobile terminal such as PDA, laptop/notebook computer or other portable computer device (page 1, paragraph 6 and page 5, paragraph 40 and page 9, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time to replace laptop computer with PDA because laptop computer would provide similar functionality but provide more processing power and display alternatively.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoi C. Lau whose telephone number is (571)272-8547. The examiner can normally be reached on M- F 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571)272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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